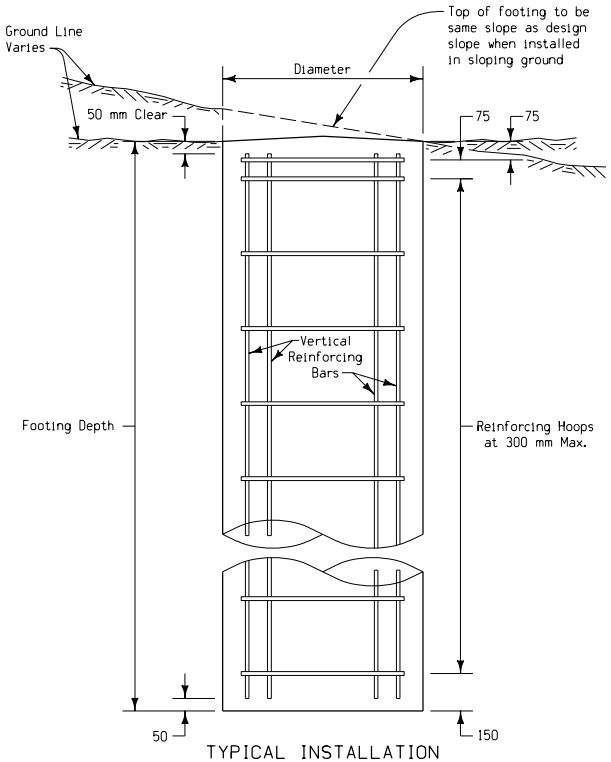
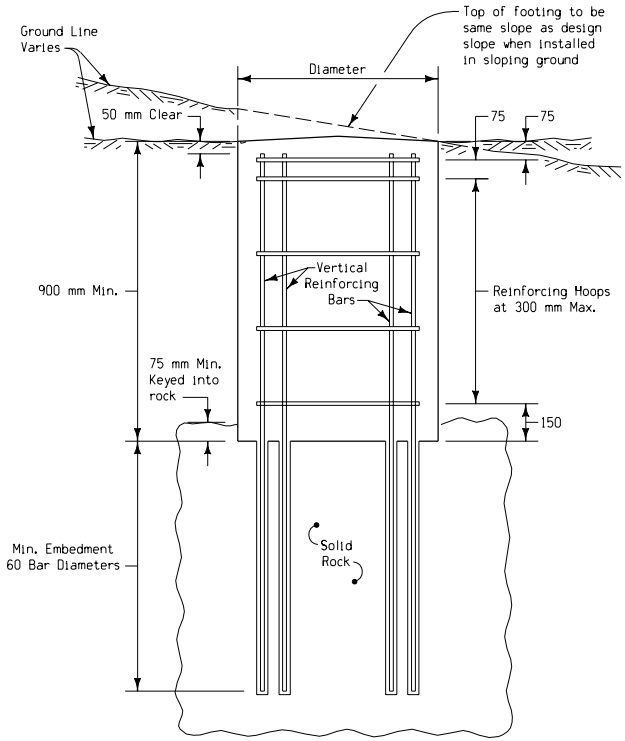
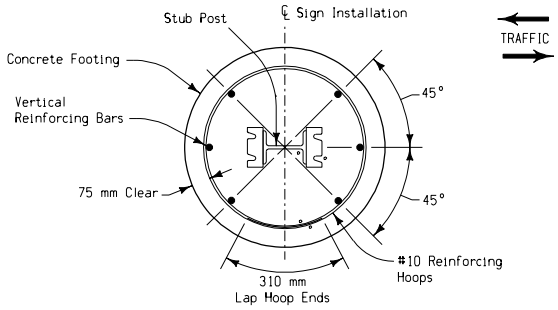


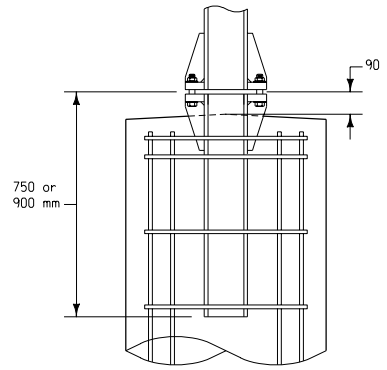
TYPICAL INSTALLATION
NORMAL FOOTING IN EARTH



ALTERNATE DESIGN
FOOTING IN SOLID ROCK



PLAN VIEW
(REINFORCING PLACEMENT AND SIGN ORIENTATION)
Note: Refer to RD-21A for details of sign post and stub.



TYPICAL BREAKAWAY POST INSTALLATION

GENERAL NOTES:

Material and methods for construction of concrete footings for breakaway sign posts detailed hereon shall be in conformance with current Standard and Supplemental Specifications.

The footing shall be constructed as shown for normal footing in earth. Where solid rock is encountered, the alternate design for footing in solid rock may be used with the approval of the Engineer.

All excavation for the footing shall be disposed of in the area adjacent to the footing and shaped to normal ground contour, unless directed otherwise by the Engineer.

The stub post shall be held in proper position by an approved device which will ensure that it remains in proper position upon completion of concrete placement.

Structural grade concrete shall be used for the footing.

The contract price for size of footing required shall be full compensation for construction of footing as detailed hereon, including all necessary excavation regardless of character.

NOTE:
Vertical bars in solid rock shall be set as follows:
1. Drill holes twice bar diameter and fill with water.
2. When hole is fully saturated; blow water out and fill two–thirds depth with sand cement mortar.
3. Insert bar and consolidate mortar.
4. Fill hole to top with mortar.

FOOTING REINFORCING DATA					
Post Size	Stub Length	Footing		Vertical Rein. Bar	
		Diameter	Depth	Size	Length ①
W150x18	750	600	1800	20	1700
W150x22	750	600	1950	20	1850
W200x27	750	600	2100	20	2000
W200x31	900	800	2250	25	2150
W250x33	900	800	2400	25	2300
W250x39	900	800	2550	25	2450
W310x39	900	800	2700	25	2600

① Lengths are for normal footings. Required length may vary where alternate rock design is used.

All dimensions given in millimeters unless noted.

METRIC VERSION

Iowa Department of Transportation
Project Development Division

STANDARD ROAD PLAN RD-22A

REVISION: Metric conversion of Standard Road Plan RD-22A no. 5 (dated 11-5-85).

REVISION NO. 5

David P. Ruth 03-14-97
APPROVED BY DESIGN METHODS ENGINEER

REVISION DATE 07-15-97

FOOTING DETAILS
FOR BREAKAWAY SIGN POST